SUPPLEMENTAL AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q97191

Application No.: 10/594,011

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

## LISTING OF CLAIMS:

1. (currently amended): A surface treatment agent comprising (1) a fluorine-containing polymer and (2) water and/or an organic solvent,

characterized in that the fluorine-containing polymer comprises (A) repeating units derived from (a) a fluorine-containing compound of the formula:

$$CH_2 = C(-X) \cdot C(=O) \cdot Y \cdot [-(CH_2)_m \cdot Z \cdot ]_p \cdot Rf$$
 (I)

$$CH_2 = C(-X) - C(=O) - Y - [-(CH_2)_m - Z -]_p - (CH)_n - Rf$$
 (I)

wherein X is a hydrogen atom or a methyl group;

Y is -O- or -NH-

Z is -S- or -SO<sub>2</sub>-;

Rf is a perfluoroalkyl group having 1 to 6 carbon atoms;

m is from 1 to 10, n is from 0 to 10; and

p is 0 or 1 provided that p is 1 when Y is -O-.

- 2. (original): The surface treatment agent according to claim 1, which is in the form of a solution, an emulsion or an aerosol.
- 3. (previously presented): A method of treating a substrate with the surface treatment agent according to claim 1 comprising a step of applying the surface treatment agent to the substrate.

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- 4. (previously presented): The method according to claim 3, wherein the substrate is a textile, a masonry, a filter, a dust protective mask, a fuel cell, glass, paper, wood, leather, fur, asbestos, brick, cement, metal and oxide, ceramics, plastics, a coated surface or a plaster.
  - 5. (original): A textile treated with the surface treatment agent according to claim 1.
  - 6. (original): A carpet treated with the surface treatment agent according to claim 1.
  - 7. (previously presented): A fluorine-containing compound(a') of the formula:

$$CH_2 = C(-X) - C(=O) - O - (CH_2)_m - S - Rf$$
 (I')

wherein X is a hydrogen atom or a methyl group;

Rf is a perfluoroalkyl group having 1 to 6 carbon atoms;

m is from 1 to 10.

- 8. (previously presented): The fluorine-containing compound according to claim 7, wherein the carbon number of the perfluoroalkyl group (Rf group) is from 1 to 4.
  - 9. (canceled).
- 10. (previously presented): A fluorine-containing polymer comprising (A) repeating units derived from the fluorine-containing compound (a') according to claim 7.
  - 11. (original): The fluorine-containing polymer according to claim 10, further having:
  - (B) repeating units derived from (b) a monomer free from a fluorine atom, and
  - (C) optionally, repeating units derived from (c) a crosslinkable monomer, in addition to the repeating units (A).
- 12. (previously presented): The fluorine-containing polymer according to claim 11, wherein the fluorine atom-free monomer (b) forming the repeating units (B) is an acrylate of the general formula:

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wherein  $A^1$  is a hydrogen atom or a methyl group, and  $A^2$  is a hydrocarbon group having 1 to 30 carbon atoms.

- 13. (original): The fluorine-containing polymer according to claim 11, wherein the crosslinkable monomer (c) forming the repeating units (C) is a fluorine-free monomer having at least two reactive groups and/or carbon-carbon double bonds.
- 14. (previously presented): The fluorine-containing polymer according to claim 11, wherein the amount of the fluorine atom-free monomer (b) is 0.1 to 50 parts by weight, and the amount of the crosslinkable monomer (c) is at most 20 parts by weight, based on 100 parts by weight of the fluorine-containing compound (a').
- 15. (previously presented): The surface treatment agent according to claim 1, wherein the carbon number of the perfluoroalkyl group (Rf group) is from 1 to 4.
- 16. (previously presented): The surface treatment agent according to claim 1, further having:
  - (B) repeating units derived from (b) a monomer free from a fluorine atom, and
  - (C) optionally, repeating units derived from (c) a crosslinkable monomer, in addition to the repeating units (A) derived from the fluorine-containing compound (a).
- 17. (previously presented): The surface treatment agent according to claim 16, wherein the fluorine atom-free monomer (b) forming the repeating units (B) is an acrylate of the general formula:

wherein  $A^1$  is a hydrogen atom or a methyl group, and  $A^2$  is a hydrocarbon group having 1 to 30 carbon atoms.

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- 18. (previously presented): The surface treatment agent according to claim 16, wherein the crosslinkable monomer (c) forming the repeating units (C) is a fluorine-free monomer having at least two reactive groups and/or carbon-carbon double bonds.
- 19. (previously presented): The fluorine-containing polymer according to claim 16, wherein the amount of the fluorine atom-free monomer (b) is 0.1 to 50 parts by weight, and the amount of the crosslinkable monomer (c) is at most 20 parts by weight, based on 100 parts by weight of the fluorine-containing compound (a).
- 20. (previously presented): The fluorine-containing polymer according to claim 12, wherein  $A^2$  is an alkyl group represented by  $C_nH_{2n+1}$  (n=1 to 30).
- 21. (previously presented): The surface treatment agent according to claim 17, wherein  $A^2$  is an alkyl group represented by  $C_nH_{2n+1}$  (n=1 to 30).